

**Version A:** Similar to 6,008,249; 5,929,030; 6,130,254

**Claims: Clean Version**

5           14.     A method for the treatment of orbital disorders, selected from a group  
consisting of cataracts, glaucoma, diabetic retinopathy and macular degeneration, associated with the  
aging eye in mammals, by the application of a topical composition comprising at least one  
penetration enhancer, at least one alpha hydroxy acid, at least one carotenoid, at least one inhibitor  
of nitric oxide, at least one anti-inflammatory agent, in a therapeutically acceptable vehicle, so that  
10   the delivery of bio-affecting agents through the protective outer layer of the skin, into the underlying  
tissues and into the vascular network of the targeted body part to reduce inflammation and provide  
relief.

15           15.     The method according to claim 14, wherein said penetration enhancer is selected from  
the group selected from a group consisting of: alcohols, polyols, sulfoxides, esters, ketones, amides,  
oleates, surfactants, alkanolic acids, lactam compounds, alkanols, dialkylamino acetates, and mixtures  
thereof.

20           16.     The method according to claim 14, wherein said alpha hydroxy acid is selected from  
the group consisting of lactic acid, glycolic acid, citric acid, malic acid, decanoic acid, octanoic acid,  
tartaric acid, pyruvic acid, ammonium glycolate, alpha-hydroxyethanoic acid, ammonium alpha-  
hydroxyethanoate, alpha-hydroxyoctanoic acid, alpha-hydroxycaprylic acid and hydroxycaprylic acid.

          17.     The method according to claim 14, wherein said carotenoid is selected from the group  
consisting of  $\alpha$ -carotene,  $\beta$ -carotene, cryptoxanthin, lycopene, lutein and zeaxanthin.

          18.     The method according to claim 14, wherein said inhibitor of nitric oxide is selected  
from the group consisting of arginine-based analogues, methylated arginines, substituted L-arginine,

nitro-arginine, L-N<sup>G</sup>-nitroarginine, N<sup>G</sup>-mono-methyl-L-arginine (L-NMMA), N-nitro-L-arginine methyl ester (L-NAME), N-amino-L-arginine, N-methyl-L-arginine, N<sup>G</sup>-monomethyl-L-arginine (L-NMA); flavoprotein binders, diphenylene iodonium, iodonium derivatives, ornithine and ornithine derivatives, N-imino-ethyl-L-ornithine; tetracycline; L-canavanine; citrulline; redox dyes, methylene blue; calmodulin binders, trifluoropiperazine, calcinarin; heme binders; resveratrol; zinc compounds; tetrahydropterin analogs, aminoguanidine; niacinamide, depleters of biopterin, and methotrexate.

19. The method according to claim 14, wherein said anti-inflammatory agent is selected from the group consisting of N-acetylcysteine (NAC), ascorbyl palmitate, adcorbic acid, alpha-lipoic acid, glutathione, methyl-sulfanyl-methane (MSM), zinc compounds, and aloe vera extract.

20. The method according to claim 14, which further comprises additional agents selected from the group consisting of: alcohols, oils (mineral, vegetable, animal and synthetics), glycols, beta hydroxy acid, preservatives, stabilizers, emollients, anti-infective agents, adjuvants, thickening and gelling agents, anthocyanidins, proanthocyanidins, amino sugars, glycosaminoglycans, colorants, gums, esters, hormones, silicones, polymers, fragrances, sunscreens, acids, bases, buffers, salts, proteins and their derivatives, essential oils, other enzymes, co-enzymes and extracts, detergents, soaps, anionics, non-ionics, ionics, waxes, lipids, fillers, celluloses, amines, thickeners, sugars, manganese, magnesium, histidine, herbal derivatives, antioxidants, vitamins, minerals, aminoacids and mixtures thereof.

21. The method according to claim 14, wherein said penetration enhancer is propylene glycol.

22. The method according to claim 14, wherein said alpha hydroxy acid is glycolic acid.

**Version B:** Similar to 6,008,249; 6,344,438; 6,169,069;

**Claims:** Clean Version

14. A method for the treatment of orbital disorders, selected from a group

consisting of cataracts, glaucoma, diabetic retinopathy and macular degeneration, associated

5 with the aging eye in mammals, by the application of a topical composition comprising at least one penetration enhancer, at least one alpha hydroxy acid, and at least one active ingredient in a therapeutically acceptable vehicle, so that the delivery of bio-affecting agents through the protective outer layer of the skin, into the underlying tissues and into the vascular network of the targeted body part to reduce inflammation and provide relief.

10 15. The method according to claim 14, wherein said penetration enhancer is selected from

the group selected from a group consisting of: alcohols, polyols, sulfoxides, esters, ketones, amides, oleates, surfactants, alkanolic acids, lactam compounds, alkanols, dialkylamino acetates, and mixtures thereof.

16. The method according to claim 14, wherein said alpha hydroxy acid is selected from

15 the group consisting of lactic acid, glycolic acid, citric acid, malic acid, decanoic acid, octanoic acid, tartaric acid, pyruvic acid, ammonium glycolate, alpha-hydroxyethanoic acid, ammonium alpha-hydroxyethanoate, alpha-hydroxyoctanoic acid, alpha-hydroxycaprylic acid and hydroxycaprylic acid.

17. The method according to claim 14, wherein said active ingredient is selected from the

20 group consisting of lutein, zeaxanthin, nitric oxide synthase inhibitors, resveratrol, alpha hydroxy acid, beta hydroxy acid, N-acetylcysteine, ascorbityl palmitate, ascorbic acid, alpha-lipoic acid, glutathione, methyl-sulfonyl-methane, zinc compounds, aloe vera, antioxidants, vitamins,

minerals, amino acids, and mixtures thereof, in a therapeutically acceptable vehicle.

18. The method according to claim 14 which further comprises additional agents selected from the group consisting of: alcohols, oils (mineral, vegetable, animal and synthetics), glycols, beta hydroxy acid, preservatives, stabilizers, emollients, anti-infective agents, adjuvants, thickening and gelling agents, anthocyanidins, proanthocyanidins, amino sugars, glycosaminoglycans, colorants, gums, esters, hormones, silicones, polymers, fragrances, sunscreens, acids, bases, buffers, salts, proteins and their derivatives, essential oils, other enzymes, co-enzymes and extracts, detergents, soaps, anionics, non-ionics, ionics, waxes, lipids, fillers, celluloses, amines, thickeners, sugars, manganese, magnesium, histidine, herbal derivatives, antioxidants, vitamins, minerals, aminoacids and mixtures thereof.

19. The method according to claim 14, wherein said penetration enhancer is propylene glycol.

20. The method according to claim 14, wherein said alpha hydroxy acid is glycolic acid.

**Version C:** Similar to 6,008,249; 6,344,438; 6,169,069;

**Claims:** Clean Version

14. A method for the treatment of orbital disorders, selected from a group

consisting of cataracts, glaucoma, diabetic retinopathy and macular degeneration, associated with the aging eye in mammals, by the application of a topical composition comprising at least one penetration enhancer and at least one alpha hydroxy acid, in a therapeutically acceptable vehicle, so that the delivery of bio-affecting agents through the protective outer layer of the skin, into the underlying tissues and into the vascular network of the targeted body part to reduce inflammation and provide relief.

15. The method according to claim 14, wherein said penetration enhancer is selected from the group selected from a group consisting of: alcohols, polyols, sulfoxides, esters, ketones, amides, oleates, surfactants, alkanolic acids, lactam compounds, alkanols, dialkylamino acetates, and mixtures thereof.

16. The method according to claim 14, wherein said alpha hydroxy acid is selected from the group consisting of lactic acid, glycolic acid, citric acid, malic acid, decanoic acid, octanoic acid, tartaric acid, pyruvic acid, ammonium glycolate, alpha-hydroxyethanoic acid, ammonium alpha-hydroxyethanoate, alpha-hydroxyoctanoic acid, alpha-hydroxycaprylic acid and hydroxycaprylic acid.

17. The method according to claim 14, comprising coadministering at least one active ingredient is selected from the group consisting of lutein, zeaxanthin, nitric oxide synthase inhibitors, resveratrol, alpha hydroxy acid, beta hydroxy acid, N-acetylcysteine, ascorbityl palmitate, ascorbic acid, alpha-lipoic acid, glutathione, methyl-sulfonyl-methane, zinc compounds, aloe vera,

antioxidants, vitamins, minerals, amino acids, and mixtures thereof, in a therapeutically acceptable vehicle.

18. The method according to claim 14 which further comprises additional agents selected

from the group consisting of: alcohols, oils (mineral, vegetable, animal and synthetics),

5 glycols, beta hydroxy acid, preservatives, stabilizers, emollients, anti-infective agents, adjuvants,

thickening and gelling agents, anthocyanidins, proanthocyanidins, amino sugars, glycosaminoglycans,

colorants, gums, esters, hormones, silicones, polymers, fragrances, sunscreens, acids, bases, buffers,

salts, proteins and their derivatives, essential oils, other enzymes, co-enzymes and extracts,

detergents, soaps, anionics, non-ionics, ionics, waxes, lipids, fillers, celluloses, amines, thickeners,

10 sugars, manganese, magnesium, histidine, herbal derivatives, antioxidants, vitamins, minerals,

aminoacids and mixtures thereof.